



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,436	02/19/2003	Peter Carmeliet	522-1767	1656

23644 7590 10/19/2005
BARNES & THORNBURG, LLP
P.O. BOX 2786
CHICAGO, IL 60690-2786

EXAMINER

MONTANARI, DAVID A

ART UNIT PAPER NUMBER

1632

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/009,436	Applicant(s) CARMELIET ET AL.	
	Examiner David Montanari	Art Unit 1632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 11-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-10 have been cancelled.
2. Claims 11-31 are newly added.
3. Claims 11-31 are pending.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. Furthermore, under PCT Rule 13.2 the requirement of unity of invention referred to in PCT Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical feature" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over prior art.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 11-20, drawn to a non-human transgenic animal deficient in Gas6 function.

Group II, claim(s) 21-28, drawn to use of a Gas6 receptor for the manufacture of a medicament in the prevention and/or treatment of a disorder or disease caused by endothelial activation.

Group III, claim(s) 21-28, drawn to use of neutralizing antibodies against Gas6 for the manufacture of a medicament in the prevention and/or treatment of a disorder or disease caused by endothelial activation.

Art Unit: 1632

Group IV, claim(s) 21-28, drawn to use of neutralizing antibodies against the Gas6 receptor for the manufacture of a medicament in the prevention and/or treatment of a disorder or disease caused by endothelial activation.

Group V, claim(s) 21-28, drawn to use of an antagonist of Gas6 function for the manufacture of a medicament in the prevention and/or treatment of a disorder or disease caused by endothelial activation.

Group VI, claim(s) 29-31, drawn to use of a Gas6 receptor for the manufacture of a medicament for the treatment of an individual with an elevated risk for a disorder or disease caused by endothelial dysfunction.

Group VII, claim(s) 29-31, drawn to use of neutralizing antibodies against Gas6 for the manufacture of a medicament for the treatment of an individual with an elevated risk for a disorder or disease caused by endothelial dysfunction.

Group VIII, claim(s) 29-31, drawn to use of neutralizing antibodies against the Gas6 receptor for the manufacture of a medicament for the treatment of an individual with an elevated risk for a disorder or disease caused by endothelial dysfunction.

Group IX, claim(s) 29-31, drawn to use of an antagonist of Gas6 function for the manufacture of a medicament for the treatment of an individual with an elevated risk for a disorder or disease caused by endothelial dysfunction.

The inventions listed in Groups I-IX do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The special technical feature linking groups I-IX appears to be that they all relate to a Gas6.

However, Avanzi et al. teach that Gas6 inhibits granulocyte adhesion to endothelial cells (GAS6 Inhibits Granulocyte Adhesion to Endothelial Cells, 1998, Blood, Vol. 91, pgs. 2334-2340).

Therefore, the technical feature linking the inventions of groups I-II does not constitute a special technical feature as defined by PCT Rule 13.2, as it does not define a contribution over the prior art.

The special technical feature of Group I is considered to be a non-human mammal comprising a disruption in Gas6 function.

The special technical feature of Group II is considered to be the Gas6 receptor.

The special technical feature of Group III is considered to be a neutralizing antibody against Gas6.

Art Unit: 1632

The special technical feature of Group IV is considered to be a neutralizing antibody against the Gas6 receptor.

The special technical feature of Group V is considered to be an antagonist of Gas6 function.

The special technical feature of Group VI is considered to be a the Gas6 receptor.

The special technical feature of Group VII is considered to be a neutralizing antibody against Gas6.

The special technical feature of Group VIII is considered to be a neutralizing antibody against the Gas6 receptor.

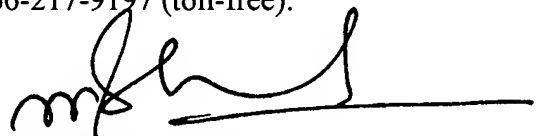
The special technical feature of Group IX is considered to be an antagonist of Gas6 function.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Montanari whose telephone number is 1-571-272-3108.

The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 1-571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RAM R. SHUKLA, PH.D.
SUPERVISORY PATENT EXAMINER

David A. Montanari, PhD